



June 13, 2007

TO: Payam Bozorgc, Bill Pennington, Bruce Wilcox - CEC

Thank you for the opportunity to provide public comment at the June 13<sup>th</sup> workshop. As we stated we are very appreciative of the time and effort you have put into this project. In follow-up to our comments;

- 1) Dr. Nigel Cherry of Lafarge Research is almost done running the TDV values for the duct loss for the California construction methods that should allow Dr. Miller to complete the algorithm for the tile portion of the calculator. As we previously discussed we will forward that information when Dr. Miller and André Desjarlais have completed.
- 2) While we understand the "air value" being part of Bruce Wilcox's calculations as an R-value of 0.85, it still seems appropriate to try and establish the direct values for the different configurations. Bruce's inclusion of the flat tile in the direct deck and on a wood batten installation method is one value, but there is increased value for the higher S profiles and counter batten installations that increase the air space and corresponding air flow. In the work performed at Florida Solar and ORNL this can be up to a 20% increase in performance for the latter. The completion of Dr. Millers work will support the same conclusions as the work done by the above and by Dr. Nigel Cherry at the Lafarge Research center in the UK. It would then allow other roofing materials such as metal, or any material that wants to develop an airspace to submit their information for proper recognition. We have done this in Florida for wind uplift data at the various high wind applications required around the state. We could then properly address the issues of the prescriptive new construction correctly.
- 3) On the topic of emissivity. We are not sure why the requirement of the 0.90, since the emissivity does not bring the value to the roof system that the reflectivity provides. We have not run the SRI values to know how it will impact, but we know that the majority of concrete and clay tiles will be in the 0.82 -0.89 range for emissivity. Is there the opportunity for the value to be reviewed? I know that Jerry Vandewater has submitted his test results on the MonierLifetile products to Payam so you can see the range. They are the largest producer of tile in the world and would be representative of the values we would see from our other producers. I talked with Yoshi at MCA Clay tile and he would be happy to share his results as well. We are concerned that we will meet the Solar Reflectivity, but be slightly below the emissivity threshold.

- 4) As we stated in the hearings, we would estimate that about 1% of the concrete and clay tiles made in the California market could meet the 0.25 reflectivity. We are not sure where Hashem came up with his thoughts, but we will follow through with him on that issue and also the issue of costs for various tile roof configurations. It is important to have ORNL and LBNL both be on the same page.
- 5) Would it be possible to get a copy of Bruce Wilcox's presentation from today (June 13<sup>th</sup>). I have a meeting with our technical committee next Wednesday and it would be very helpful in bringing them up to speed on where we are at this time in the draft process for the proposed code changes.

If there is any additional information we can provide, please feel free to contact me.

Sincerely,  
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